

Title (en)

PRE-PROCESSING OF RADAR MEASUREMENT DATA FOR OBJECT DETECTION

Title (de)

VORVERARBEITUNG VON RADARMESSSDATEN ZUR OBJEKTDETEKTION

Title (fr)

PRÉTRAITEMENT DE DONNÉES DE MESURE RADAR POUR LA DÉTECTION D'OBJETS

Publication

**EP 4099047 A1 20221207 (EN)**

Application

**EP 21177177 A 20210601**

Priority

EP 21177177 A 20210601

Abstract (en)

Various examples of the disclosure relate to pre-processing radar measurement frames to obtain a range map. Covariances are determined for multiple fast-times of the radar measurement frame. It is possible to aggregate multiple measurement frames, to detect Doppler frequency-shifts of vital signals of humans.

IPC 8 full level

**G01S 7/41** (2006.01); **G01S 7/35** (2006.01); **G01S 13/34** (2006.01); **G01S 13/58** (2006.01)

CPC (source: CN EP US)

**G01S 7/354** (2013.01 - EP); **G01S 7/415** (2013.01 - EP); **G01S 13/04** (2013.01 - CN); **G01S 13/08** (2013.01 - CN); **G01S 13/343** (2013.01 - EP); **G01S 13/584** (2013.01 - EP); **G01S 13/89** (2013.01 - US); **G06N 3/088** (2013.01 - CN)

Citation (search report)

- [A] US 10996311 B2 20210504 - ROGER ANDRE [DE], et al
- [A] US 2020116850 A1 20200416 - SANTRA AVIK [DE], et al
- [A] MERCURI MARCO ET AL: "Enabling Robust Radar-Based Localization and Vital Signs Monitoring in Multipath Propagation Environments", IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, IEEE, USA, vol. 68, no. 11, 17 March 2021 (2021-03-17), pages 3228 - 3240, XP011884294, ISSN: 0018-9294, [retrieved on 20211018], DOI: 10.1109/TBME.2021.3066876

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4099047 A1 20221207**; **EP 4099047 B1 20240110**; CN 115436925 A 20221206; US 2022381901 A1 20221201

DOCDB simple family (application)

**EP 21177177 A 20210601**; CN 202210614789 A 20220531; US 202217828986 A 20220531